



**THE DATASHEET OF
GW.26.0111**





TAOGLAS®



Datasheet

2.4GHz Miniature Screw Terminal Mount Monopole Antenna

Part No:
GW.26.0111

Description

2.4GHz Miniature Screw Terminal Mount Monopole Antenna

Features:

2.4GHz Wi-Fi® Bluetooth® Operational
SMA(M) Connector
IP Rating: IP65
Height 30.3mm Diameter 7.9mm
ROHS & REACH Compliant

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1. Introduction



The GW.26 2.4GHz Monopole SMA(M) terminal mount antenna is ideal for 2.4GHz wireless applications such as Bluetooth[®] and Wireless LAN.

Many module manufacturers specify peak gain limits for any antennas that are to be connected to that module. Those peak gain limits are based on free-space conditions. In practice, the peak gain of an antenna tested in free-space can degrade by at least 1 or 2dBi when put inside a device. So ideally you should go for a slightly higher peak gain antenna than mentioned on the module specification to compensate for this effect, giving you better performance.

Upon testing of any of our antennas with your device and a selection of appropriate layout, integration technique, or cable, Taoglas can make sure any of our antennas' peak gain will be below the peak gain limits. Taoglas can then issue a specification and/or report for the selected antenna in your device that will clearly show it complying with the peak gain limits, so you can be assured you are meeting regulatory requirements for that module.

For example, a module manufacturer may state that the antenna must have less than 2dBi peak gain, but you don't need to select an embedded antenna that has a peak gain of less than 2dBi in free-space. This will give you a less optimized solution. It is better to go for a slightly higher free-space peak gain of 3dBi or more if available. Once that antenna gets integrated into your device, performance will degrade below this 2dBi peak gain due to the effects of GND plane, surrounding components, and device housing. If you want to be absolutely sure, contact Taoglas and we will test. Choosing a Taoglas antenna with a higher peak gain than what is specified by the module manufacturer and enlisting our help will ensure you are getting the best performance possible without exceeding the peak gain limits.

Connector mount is fully customizable. It has a fully IP65 rated waterproof robust housing, ensuring high reliability.

2. Specification

Electrical

Band	Frequency (MHz)	Efficiency (%)	Average Gain (dB)	Peak Gain (dBi)	Impedance	Polarization	Radiation Pattern	Power consumption
Wi-Fi - 2.4 GHz	2400-2500	48.7	-3.12	2.24	50 Ω	Vertical	Omni directional	10W

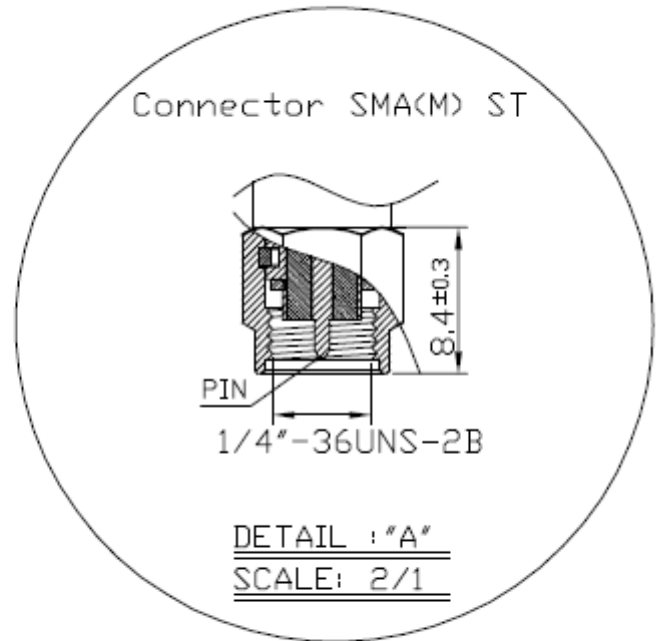
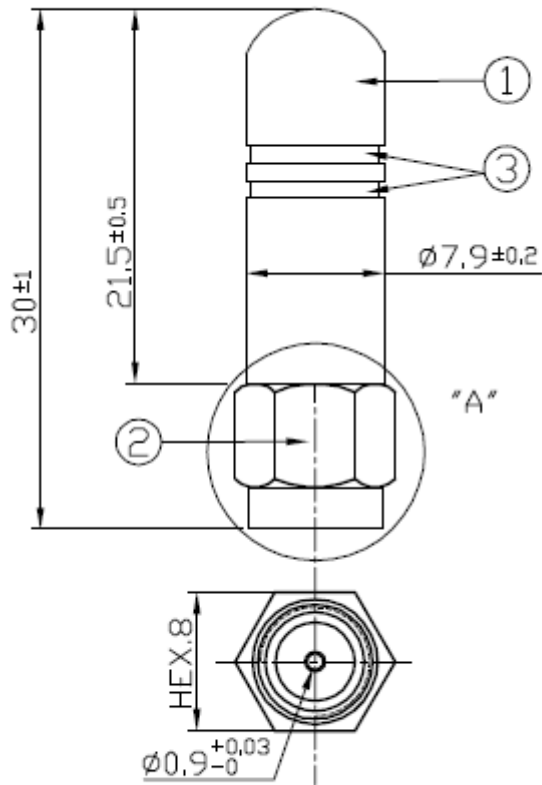
Mechanical

Dimensions	$\varnothing 7.9 \times 30\text{mm}$
Weight	4g
Material	TPEE
Connector	SMA(M)

Environmental

Operating Temperature	$-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
Storage Temperature	$-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
IP Rating	IP65

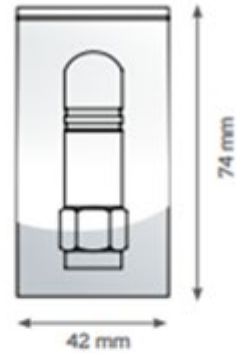
3. Mechanical Drawing



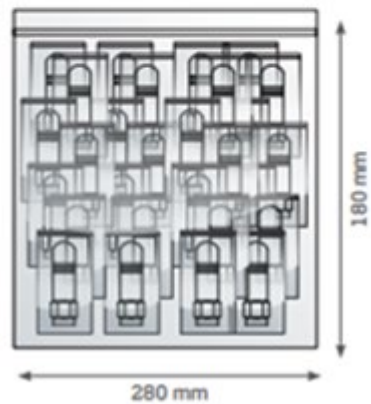
1	Connector	SMA(M)ST Brass
2	Antenna Cover	TPEE (Black)
3	Colour Stripes	Apple Green – Acrylic Paint

4. Packaging

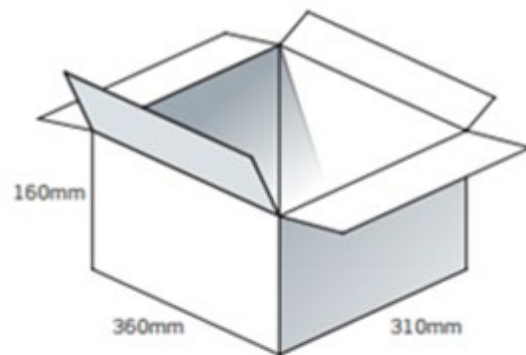
1 pcs GW.26.0111 per PE Bag
 Bag Dimensions - 74 x 42 mm
 Weight - 4g



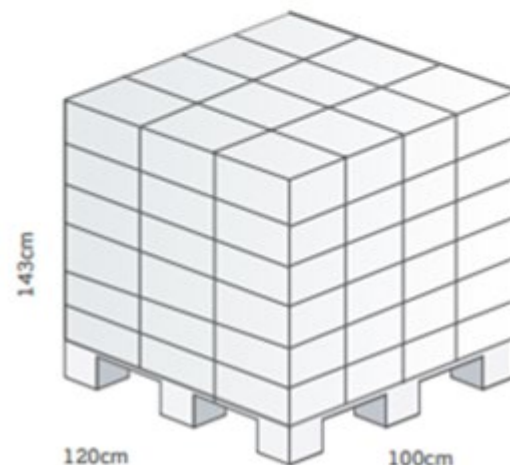
100 pcs GW.26.0111 per PE Large Bag
 Bag Dimensions - 280x 180mm
 Weight - 400g



1500 pcs GW.26.0111 per carton
 Carton - 360x 310 x 160mm
 Weight - 6.1Kg

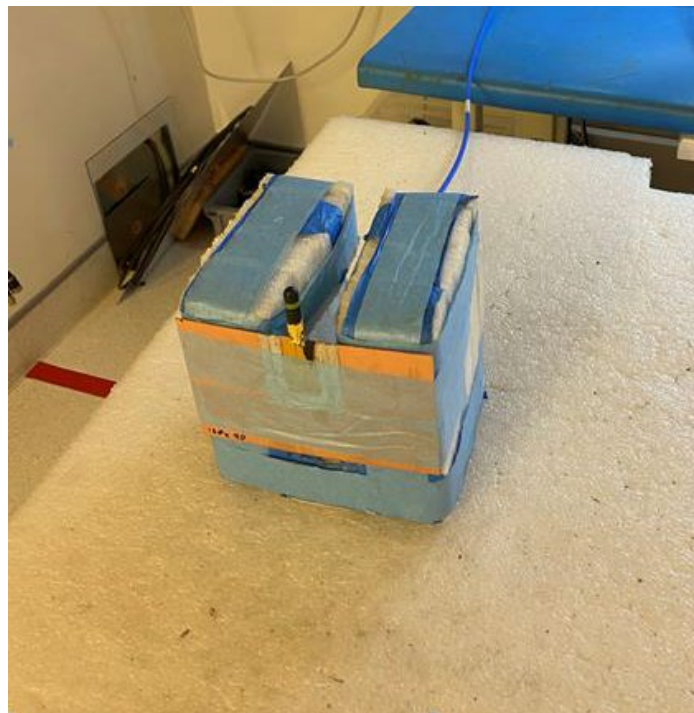
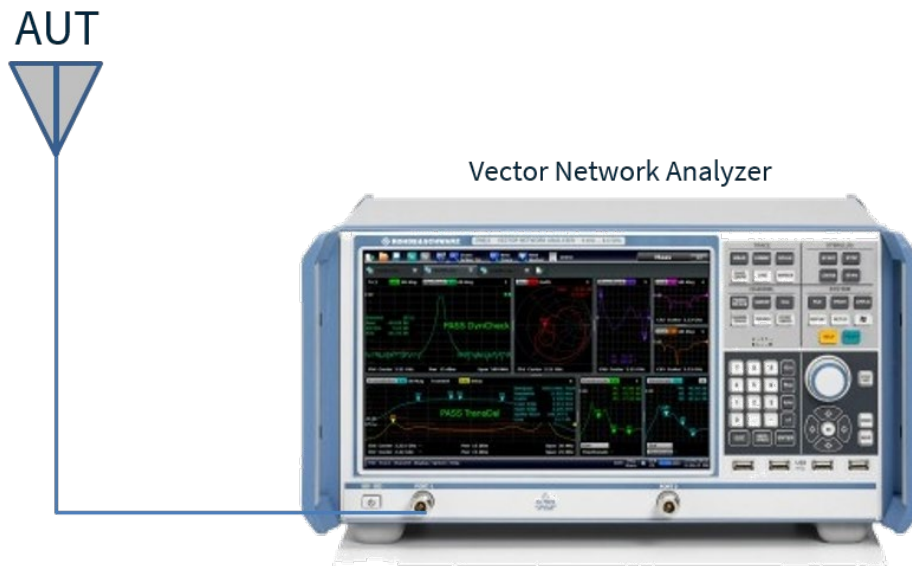


Pallet Dimensions 120x 100 x 143cm
 72 Cartons per Pallet
 12 Cartons per layer
 6 Layers



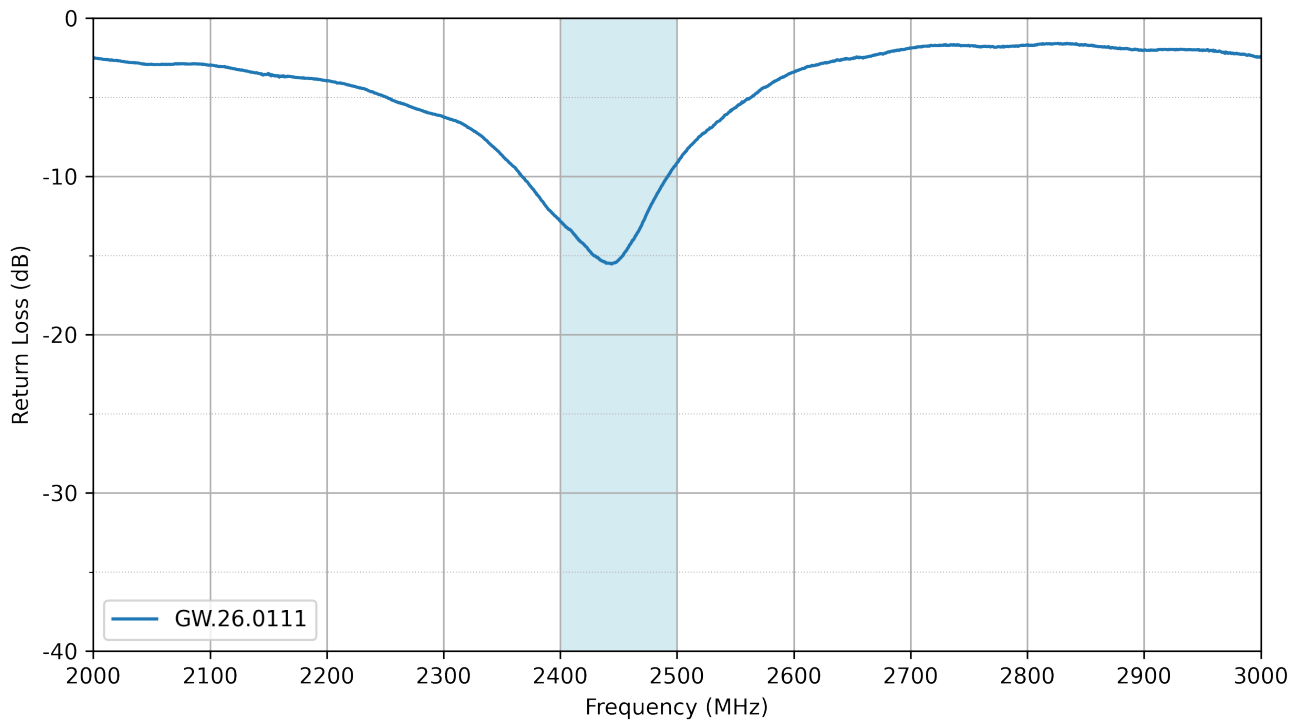
5. Antenna Characteristics

5.1 Test Setup

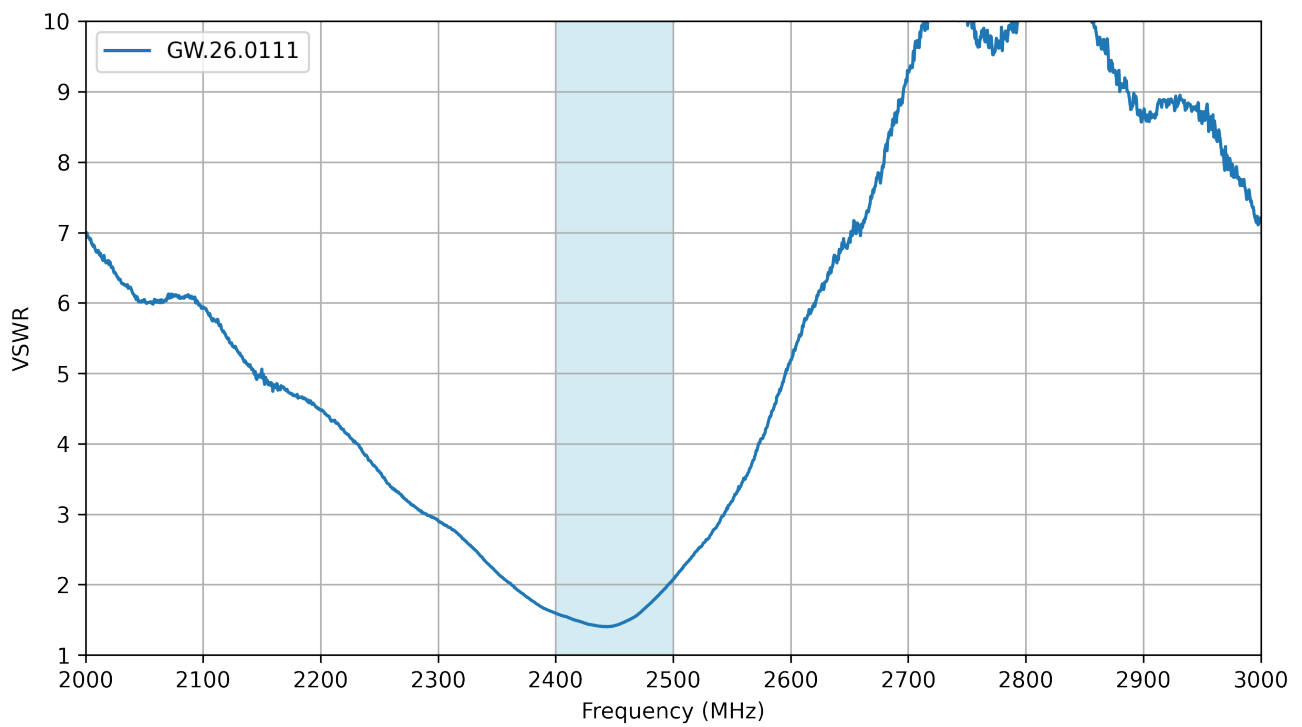


Tested on 150x90mm Ground Plane

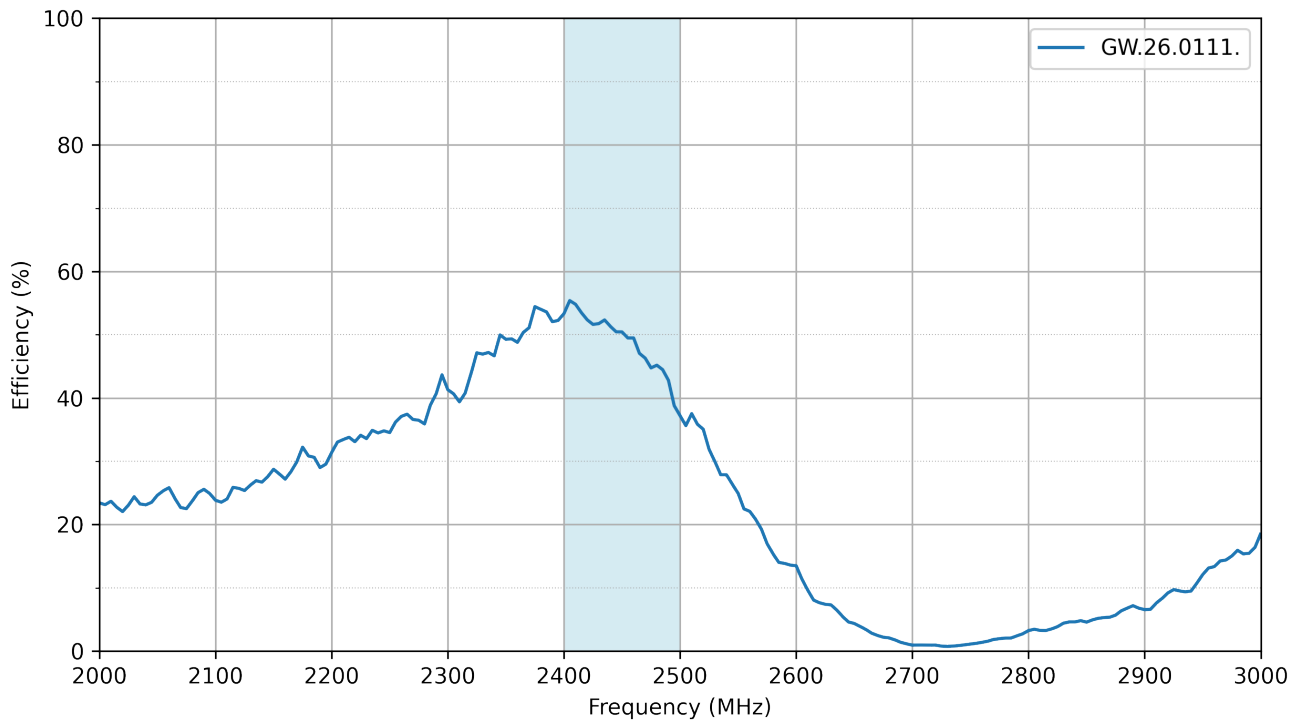
5.2 Return Loss



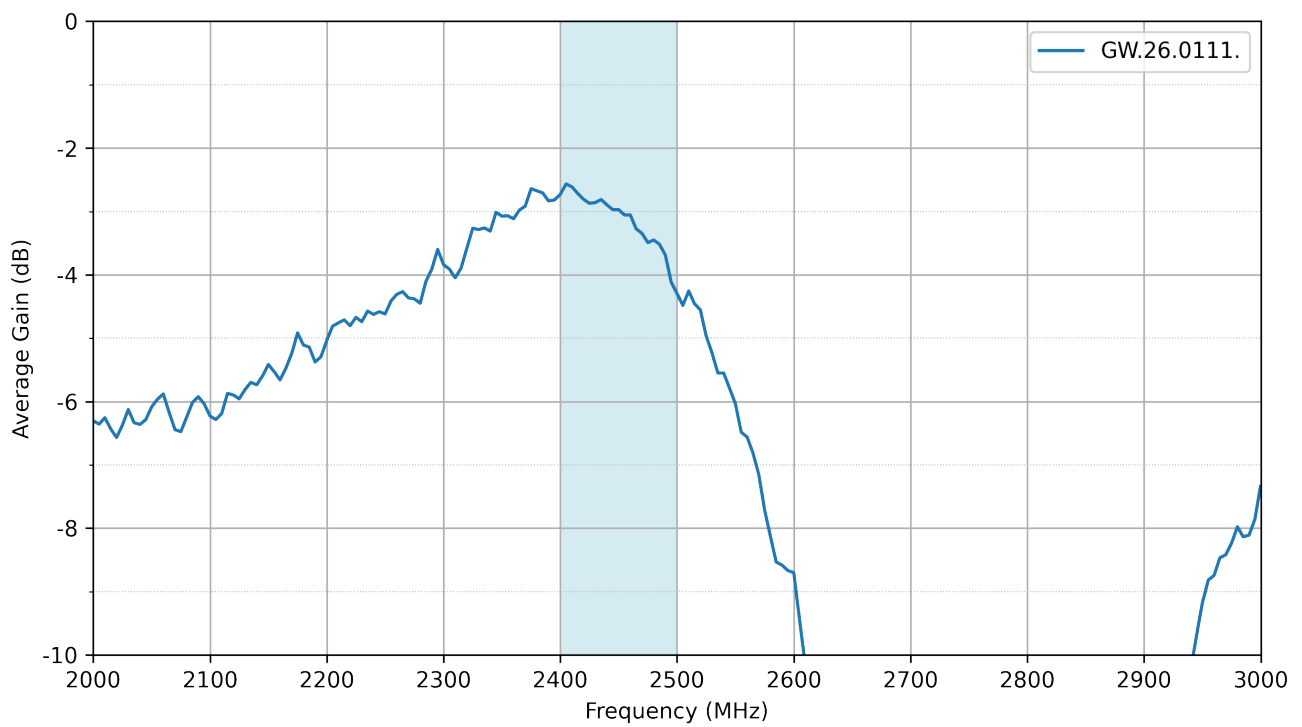
5.3 VSWR



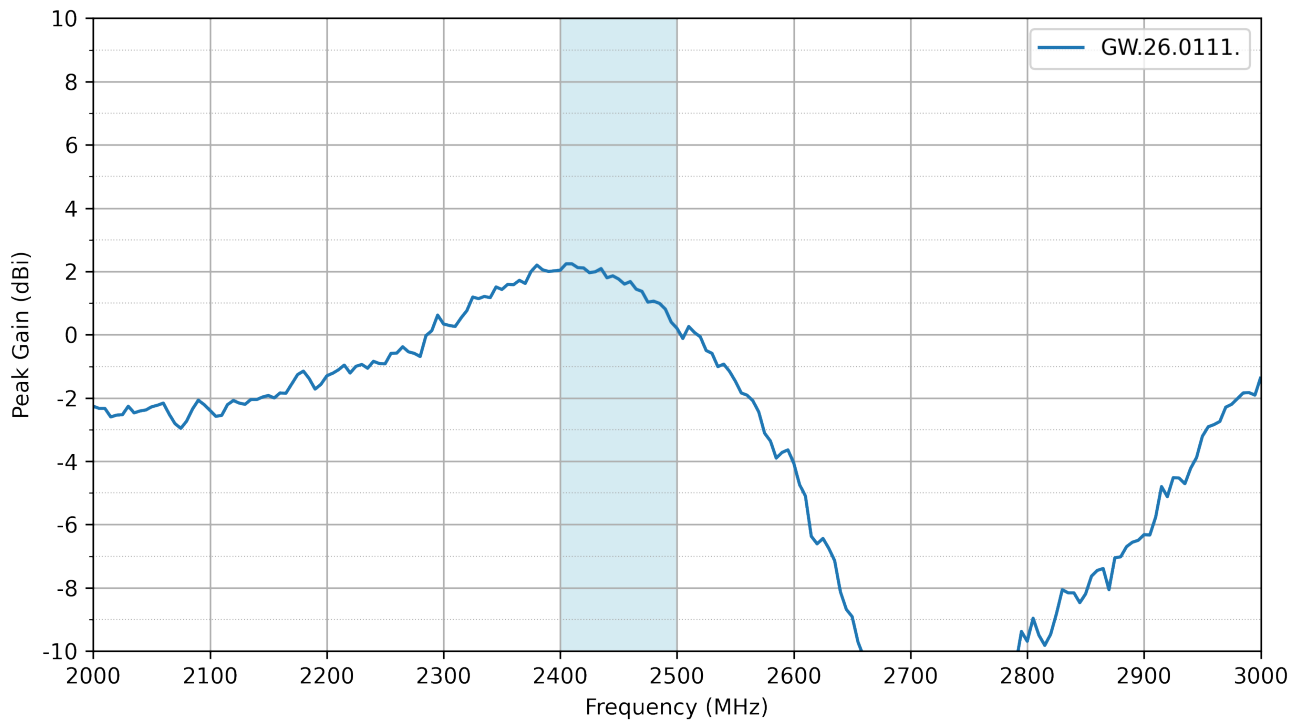
5.4 Efficiency



5.5 Average Gain

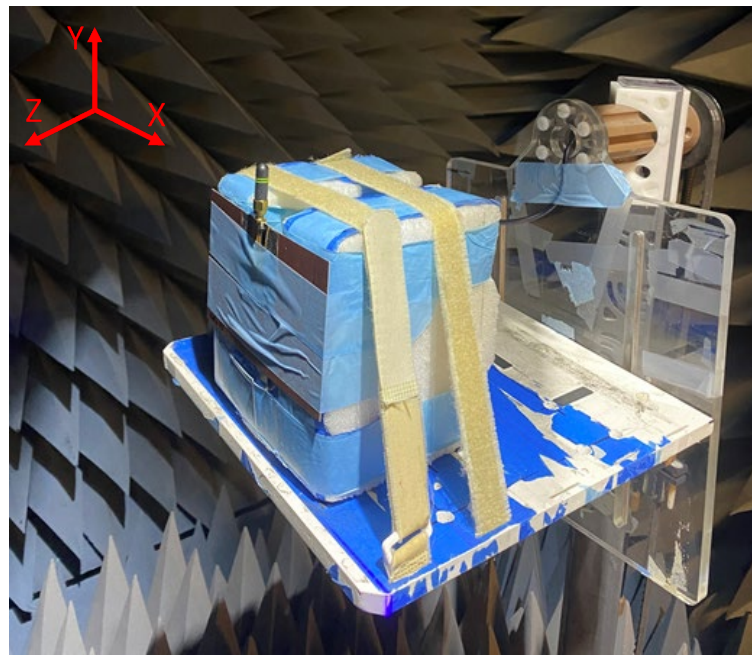
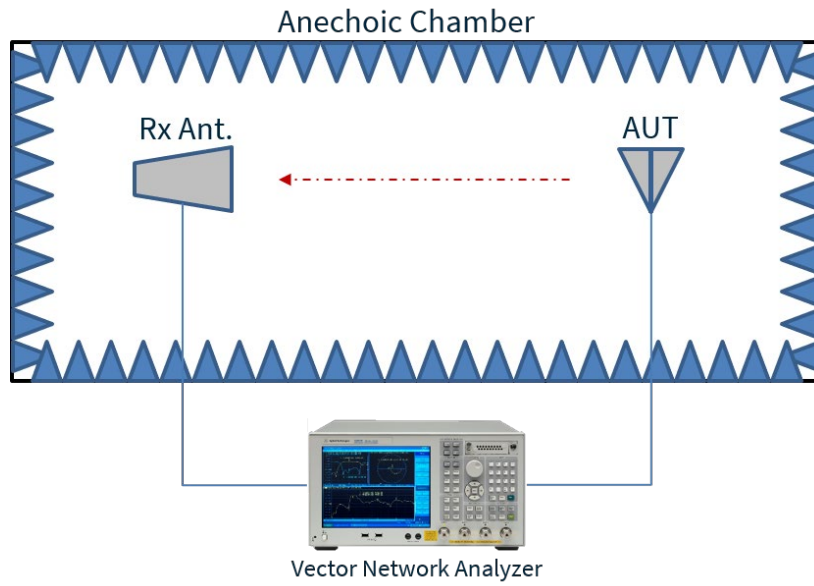


5.6 Peak Gain



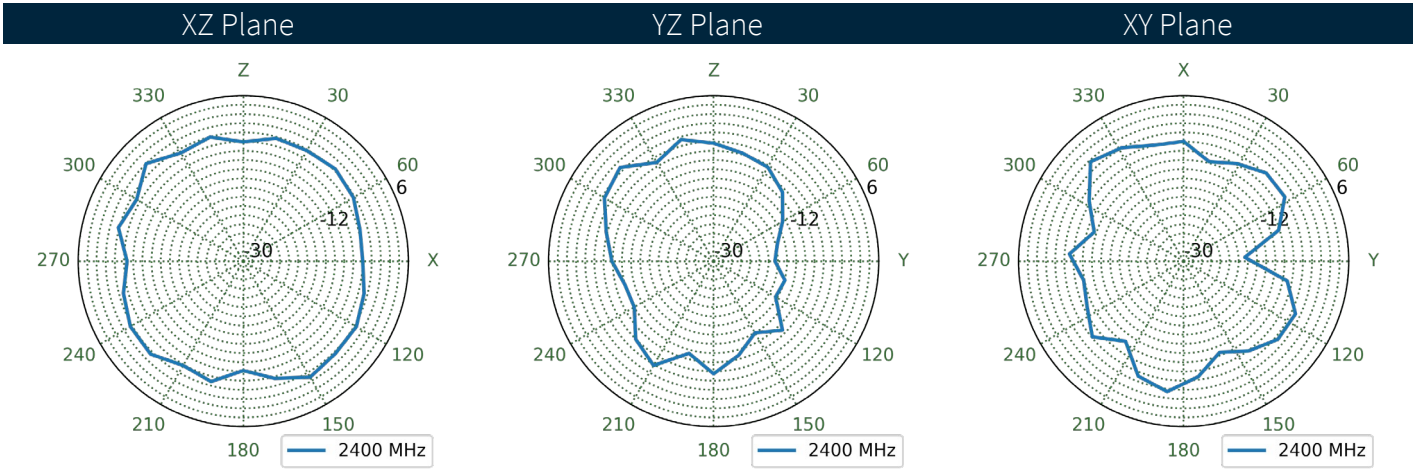
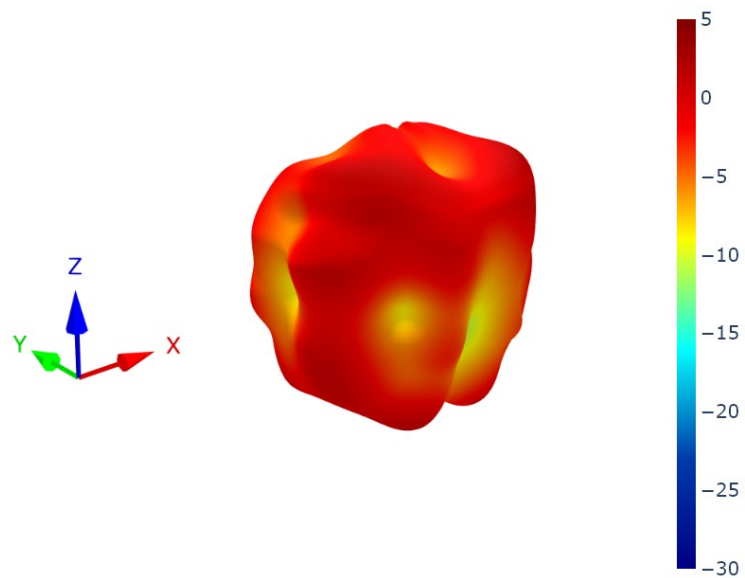
6. Radiation Patterns

6.1 Test Setup

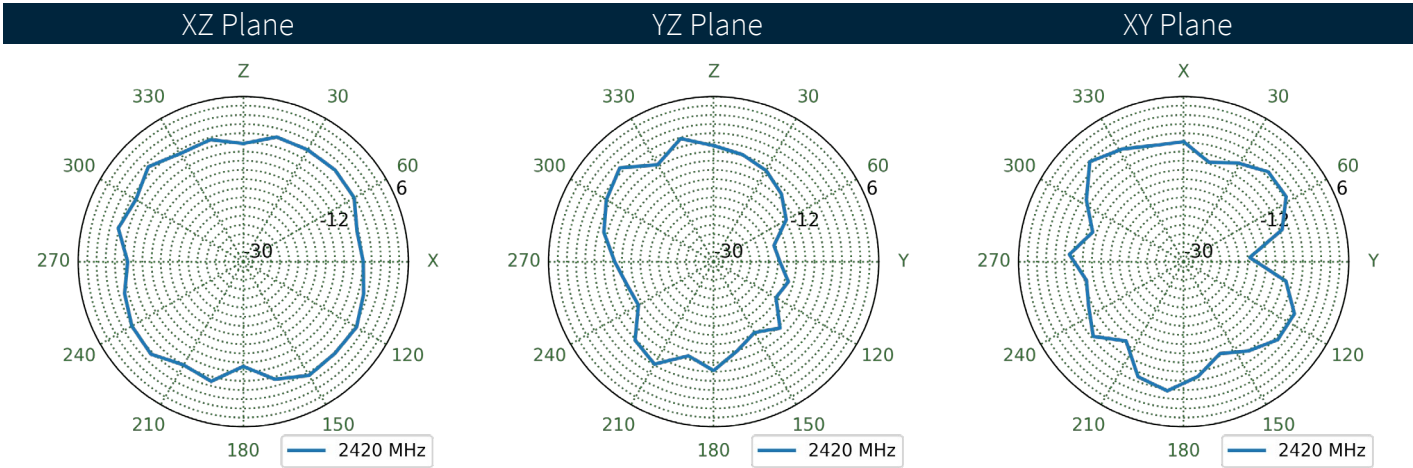
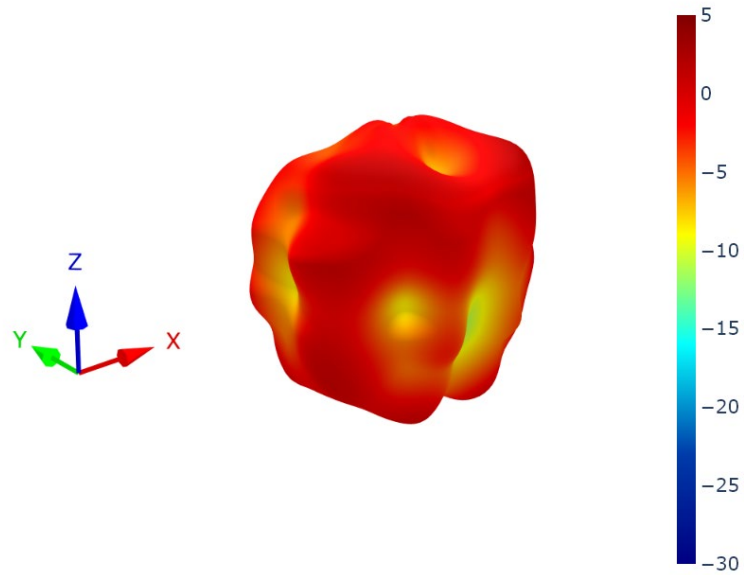


Tested on 150x90mm Ground Plane

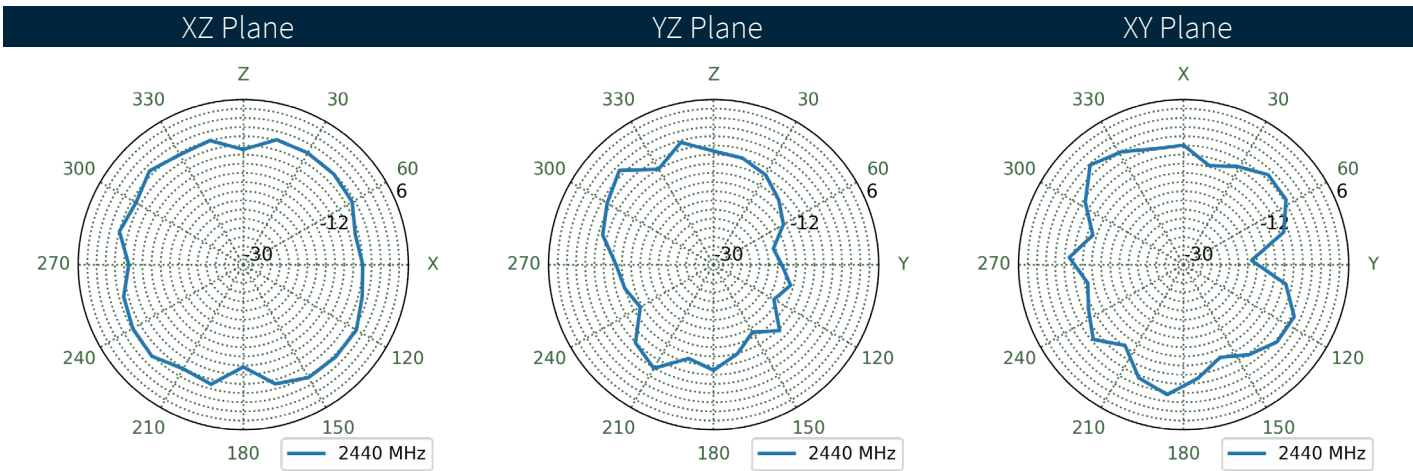
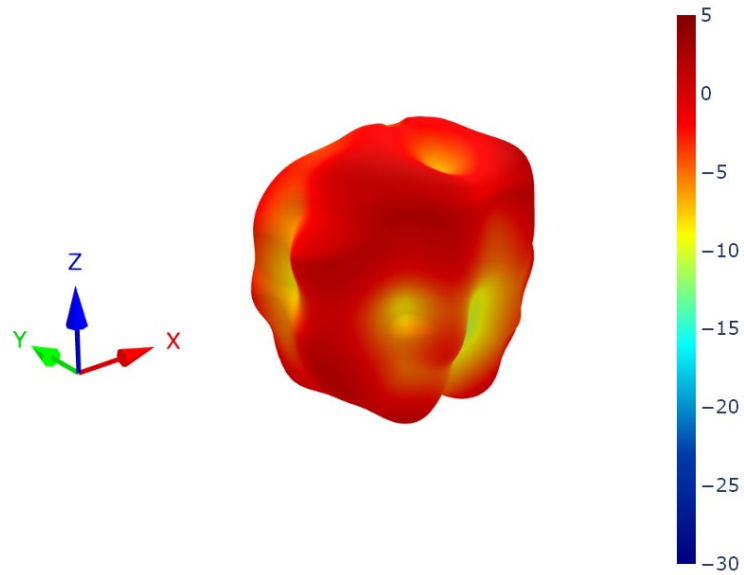
6.2 Patterns at 2400 MHz



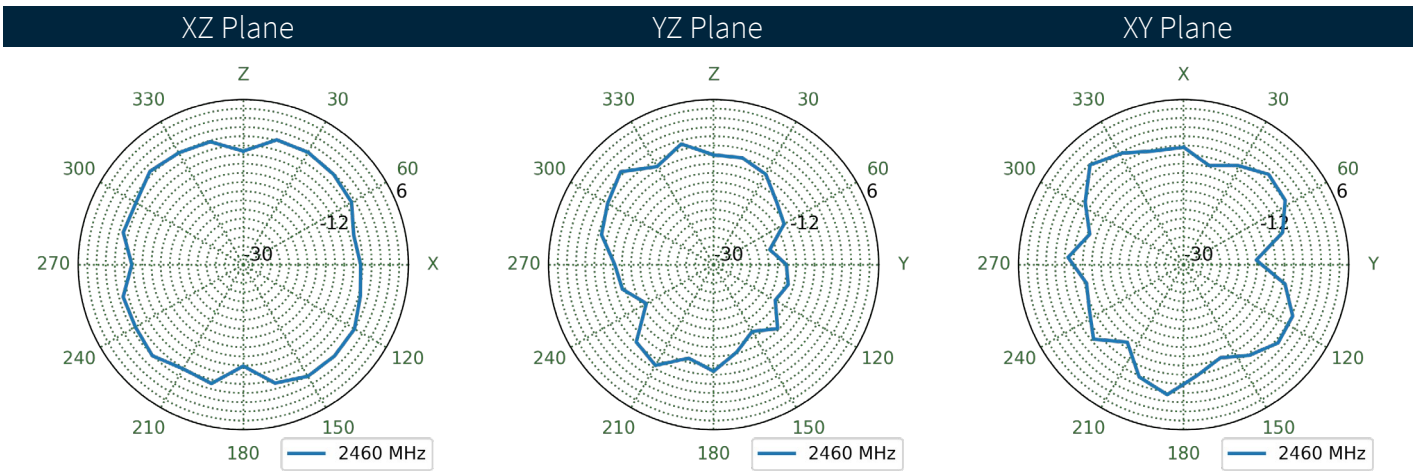
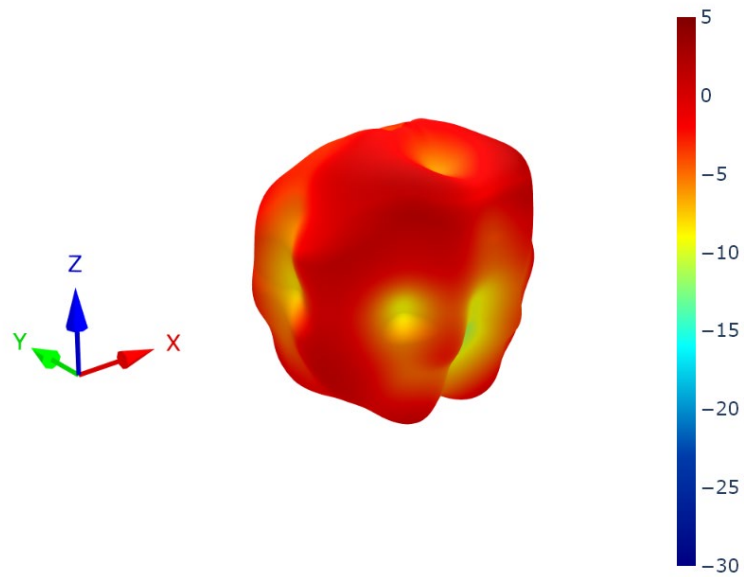
6.3 Patterns at 2420 MHz



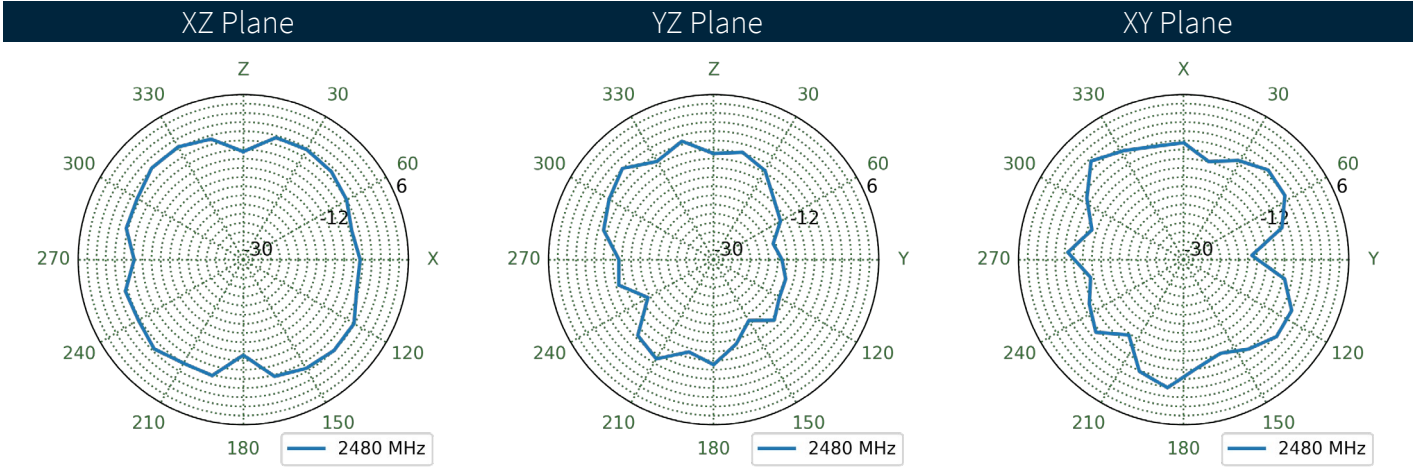
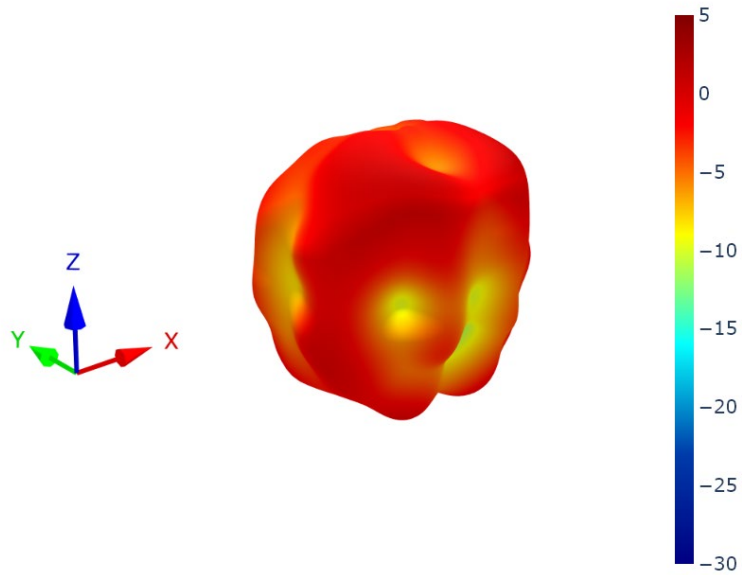
6.4 Patterns at 2440 MHz



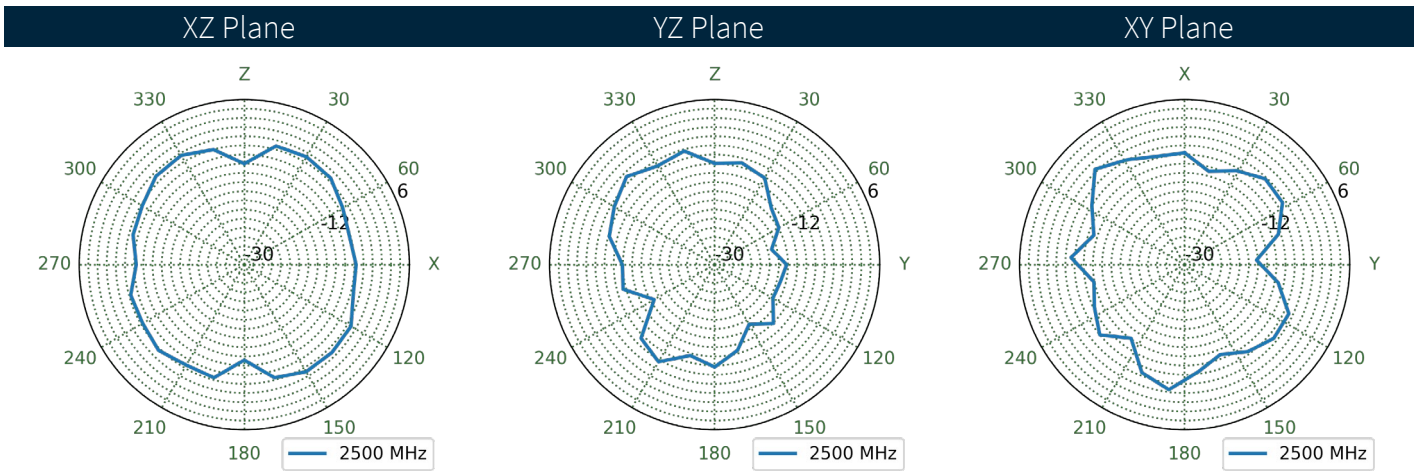
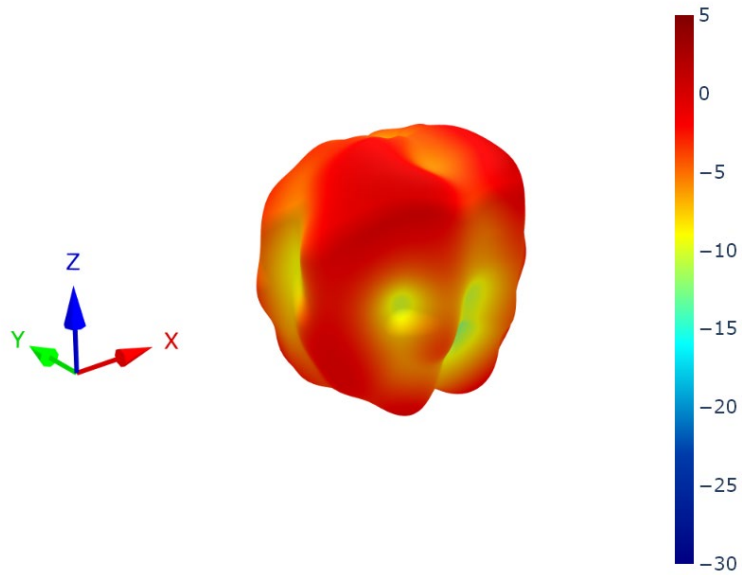
6.5 Patterns at 2460 MHz



6.6 Patterns at 2480 MHz



6.7 Patterns at 2500 MHz



Changelog for the datasheet

SPE-11-8-035 – GW.26.0111

Revision: M (Current Version)

Date:	2025-11-17
Notes:	Updated weight figures in packaging section of the datasheet.
Author:	Conor McGrath

Previous Revisions

Revision: L

Date:	2025-03-28
Notes:	Added mention of IP65 to Introduction.
Author:	Conor McGrath

Revision: G

Date:	2015-08-24
Notes:	Added Note on Gain
Author:	Aine Doyle

Revision: K

Date:	2023-08-31
Notes:	Updated Format
Author:	Thomas Doyle

Revision: F

Date:	2014-03-12
Notes:	Amended Bandwidth to 100MHz
Author:	Aine Doyle

Revision: J

Date:	2017-02-13
Notes:	Made changes to intro as per doc issued by DC.
Author:	Andy Mahoney

Revision: E

Date:	2013-09-16
Notes:	Amended table heading o Page 2 - general formatting
Author:	Aine Doyle

Revision: I

Date:	2017-01-05
Notes:	Updated with Packaging and disclaimer info
Author:	Andy Mahoney

Revision: D

Date:	2012-03-26
Notes:	
Author:	Unknown

Revision: H

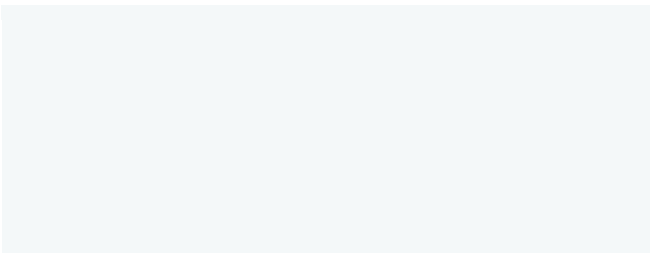
Date:	2016-05-18
Notes:	Amended Peak Gain
Author:	Aine Doyle

Revision: C

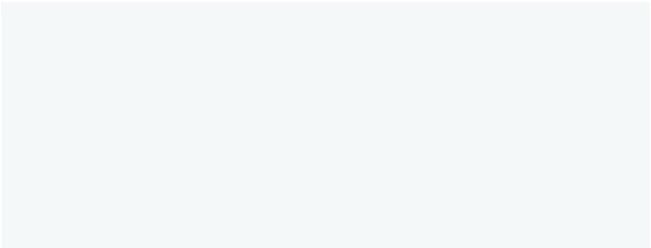
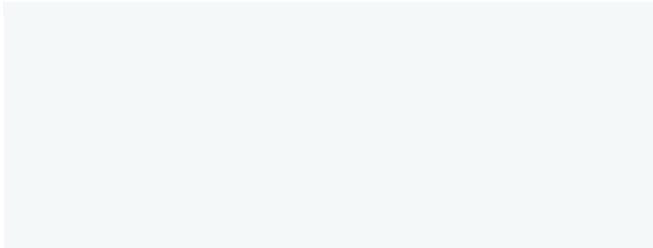
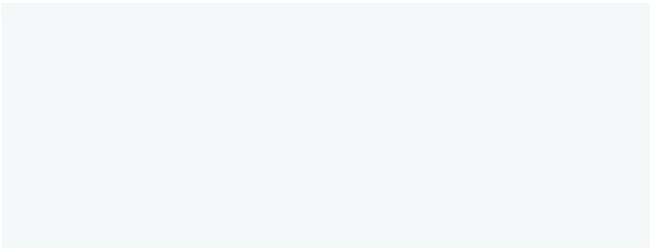
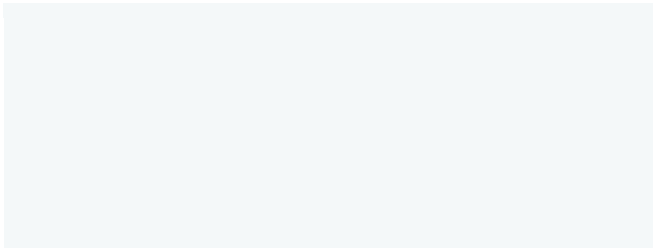
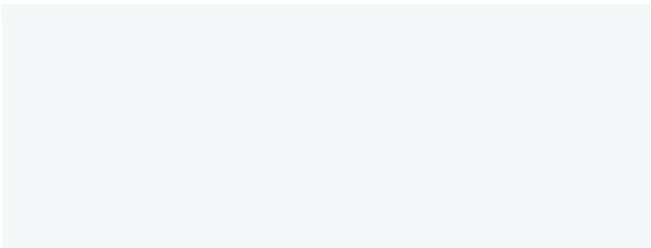
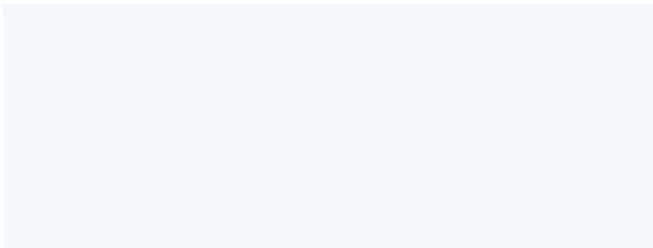
Date:	2011-05-08
Notes:	
Author:	Unknown

Previous Revisions

Revision: B	
Date:	2011-07-20
Notes:	
Author:	Unknown



Revision: A (First Release)	
Date:	2011-07-14
Notes:	
Author:	Unknown





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